



# Holistic approach

*In a sustainable garden plants flourish and each element is expertly integrated*

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Designing sustainable gardens is about more than just including a vegetable garden, rainwater tank or worm farm, although all are worthy inclusions. A well-planned design is the glue that binds all the elements of a sustainable garden together, ensuring each works in harmony with the other.

## Complete integration

Sustainable gardens need to be responsive to the constraints of the site. Considerations such as the placement of deciduous trees, shrubs or climbers to the north-west aspect will assist with passive solar design. When planning a new garden, you also need to consider aspect, slope, soil types, microclimates, rainfall, and existing features such as your home, your neighbour's home, trees and fences.

A sustainable design will successfully integrate all elements of the garden and include some that serve more than one purpose. This might be a screening hedge made from fruiting plants like mandarins or clumping bamboo, which can be used as a supply of garden stakes. Structural landscape elements such as retaining walls and raised garden beds can also do double duty.

## Happy, healthy plants

Happy plants are healthy plants. Just like us, when plants get stressed they are more likely to get ill — and they're more likely to struggle and waste resources if they're not naturally suited to the growing conditions in your garden.

Choose plants that will thrive in the soil, aspect and rainfall you have; that way you will reduce, or eliminate, the need to fertilise, spray for pests or irrigate.

Another way to keep plants stress-free is to keep your soil healthy. Healthy soil is organic, friable and does not have extreme fluctuations of temperature or moisture. Soil is made of living things and there are millions if not billions of tiny organisms (bacteria, protozoa, nematodes, fungus and fungal hyphae) in your soil, which are referred to as microflora.

## Choosing materials

Sustainable garden design requires a holistic approach to the selection of construction materials. Considerations include:

**1** The chemical treatment or composition of a material to avoid off-gassing or harmful exudates such as arsenic. (If you need a gas mask to install it, don't.)

**2** The method of construction required and whether deconstruction for recycling or upcycling will be possible in the future. (Will the material have value, once used?)

## Expert tip

To keep soil healthy, create a good environment for microflora in the soil. To achieve this, forgo the use of chemical fertilisers or pesticides and mulch your garden beds with composted plant material.

**ABOVE LEFT** To keep soil healthy, conserve water and reduce weed growth. Garden beds need to be mulched with organic material such as straw.

**ABOVE** Sustainability means the wise use of materials. Here, an unwanted pipe has been turned into a handy planter for strawberries.

**3** If a material, such as natural stone, is sourced locally it will take less fuel to transport it to the site. Or, in the case of timber, has it been sourced from sustainably managed forests as certified by the Forestry Stewardship Council. (Just remember, if you don't choose wisely, the cost to the environment may be much more than the price you paid for the piece of timber.)

**4** Can you use a recycled or upcycled resource in place of a new material? Recycled or upcycled materials generally have embodied energy and patina and can add character to landscapes.

## Working smarter

Mostly, sustainable gardening is about working smarter not harder. It is about working with and using natural systems rather than trying to bend Mother Nature to your will. It is about being mindful of the impact you are having on the environment and maintaining a healthy, well-balanced garden that will, ultimately, be easier to maintain and a pleasure to spend time in. ■

*Prepared by Adrian Swain and the ecodesign team on behalf of the Australian Institute of Landscape Designers & Managers (AILDM): [www.ildm.com.au](http://www.ildm.com.au)*